

CLAIMS

1. A binder for a packaging laminate, which binder comprises a polyolefin grafted with an unsaturated alkoxysilane, characterised in that said grafted polyolefin is blended with a non-grafted polyolefin, in said binder.
2. A binder according to claim 1, characterised in that said grafted polyolefin and said non-grafted polyolefin are polyolefins of the same type, preferably polyethylene type polyolefins.
3. A binder according to claim 1 or 2, characterised in that it comprises 30 – 70 %, preferably 40 – 60 % and even more preferred 45 – 55 % by weight of the grafted polyolefin.
4. A binder according to any one of the preceding claims, characterised in that said binder is constituted by a dry blend of said grafted polyolefin and said non-grafted polyolefin.
5. A binder according to any one of the preceding claims, characterised in that said binder is constituted by a compound blend of said grafted polyolefin and said non-grafted polyolefin.
6. A packaging laminate (10, 30, 40, 50) comprising a film (11a) covered with silicone oxide (13a), characterised in that it comprises a binding layer (18a) of a binder according to any one of claims 1-5, which binder is arranged to bond the silicon oxide to an adjacent layer, in the laminate.
7. A packaging laminate according to claim 6, characterised in that said binder is present in the binding layer(18a) at 2-35 g/m², preferably 5-30 g/m² and even more preferred 10-25 g/m²,

calculated on dry matter.

- 5 8. A packaging laminate according to any one of claims 6 and 7, characterised in that said binding layer (18a) is co-extruded together with a polyolefin layer (22) that is free from said grafted polyolefin, the binding layer (18a) being disposed in contact with the silicon oxide (13a).
- 10 9. A packaging laminate according to any one of claims 6 - 8, characterised in that it comprises a paper or paperboard bulk layer (15), a first outermost layer (16) of a heat-sealable polyolefin and a second outermost layer (17a) of a heat-sealable polyolefin on the opposite side of the laminate, which second outermost layer (17a) comprises a metallocene polyethylene material.
- 15 10. A packaging laminate according to claim 9, characterised in that said metallocene polyethylene material is a metallocene low density polyethylene material, preferably a metallocene linear low density polyethylene material.
- 20 11. A packaging laminate according to any one of claims 9 - 10, characterised in that the basis weight of the second outermost layer (17a) is from 5 to 30 g/m², preferably from 8 to 25 g/m², more preferably from 10 to 20 g/m², dry calculated.
- 25 12. A packaging laminate according to any one of claims 9 - 11, characterised in a third layer (17b) of a heat-sealable polyolefin, arranged in direct contact with the second layer (17a) of a heat-sealable polyolefin and preferably co-extruded together with it.
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13. A packaging laminate according to any one of claims 6 - 12, characterised in that the SiOx gas barrier layer (13a) is PECVD deposited, wherein $x=1.7-2.0$, and has a thickness of 50-500 Å, preferably 80-300 Å.

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14. A packaging laminate according to any one of claims 9 - 13, characterised in that the SiOx gas barrier layer (13a), on the film (11a), faces the paper or paperboard bulk layer (15) and is positioned between the paper or paperboard bulk layer and the second outermost layer (17a) of a heat-sealable polyolefin.

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15. A packaging laminate according to claim 14, characterised in that the SiOx gas barrier layer (13a) is directly bonded to the paper or paperboard bulk layer (15), by said binding layer (18a).

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16. A packaging laminate according to any one of claims 9 - 13, characterised in that the SiOx gas barrier layer (13a), on the film (11a), faces away from the paper or paperboard bulk layer (15) and is positioned between the paper or paperboard bulk layer and the second outermost layer (17a) of a heat-sealable polyolefin.

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17. A packaging laminate according to claim 16, characterised in that the SiOx gas barrier layer (13a) is directly bonded to the second outermost layer (17a) of a heat-sealable polyolefin, by said binding layer (18a).

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18. A packaging laminate according to any one of claims 9 - 17, characterised in that it comprises a second gas barrier layer of SiOx (13b), coated onto a polymer carrier layer (11b), the first and second gas barrier layers of SiOx being arranged on opposite sides of the paper or paperboard bulk layer (15).

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19. A packaging laminate according to claim 18 and any one of claims 9 - 15, characterised in that the SiOx gas barrier layers (13a, 13b) are positioned in the laminate such that they are facing towards each other.

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20. A packaging container (60) manufactured from a packaging laminate (10, 30, 40, 50) according to any one of claims 6 - 19.